

Kauai COVID-19 CASPER



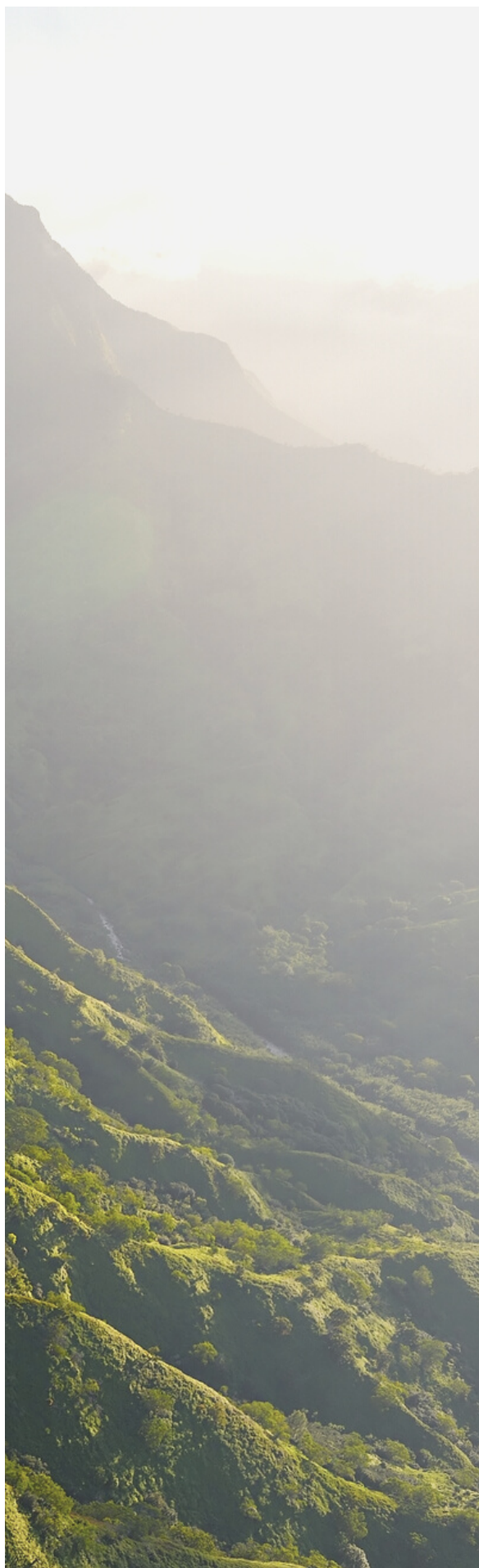
# FINAL REPORT

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## INTRODUCTION

### Background

To assess the impact of the coronavirus pandemic on Kauai households, a community assessment for public health emergency response (CASPER) was conducted on Kauai in April 2020 by the Hawaii State Department of Health's (HDOH) Kauai District Health Office. CASPER is a validated two-stage cluster sampling methodology developed by the Centers for Disease Control and Prevention (CDC) to rapidly obtain information about the health and resource needs of a community. Information obtained is generalizable to the entire sampling frame, providing population-based estimates. This methodology is designed to be inexpensive, quick, and scalable, making it ideal for use in disasters.

CASPERs can also be used to establish baseline preparedness levels and build capacity to conduct CASPERs after a disaster. The Kauai District Health Office (KDHO) conducted CASPERs annually from 2017-2019 to monitor trends in the emergency preparedness of island residents. Through these efforts, over 60 HDOH staff and volunteers were trained in this rapid health needs assessment methodology. This resource was tapped during the coronavirus disease 2019 (COVID-19) response effort on Kauai in order to determine the impacts of the pandemic on our community and any knowledge/resource gaps. The survey protocol was adapted to ensure the safety of surveyors and participants as well as compliance with physical distancing requirements. At the time the survey was conducted, Kauai had a total of twenty-one cases of COVID-19, with no new cases reported in almost two weeks.

### Objectives

The objectives of the 2020 Kauai CASPER included assessing 1) knowledge, attitudes, and practices around COVID-19, 2) financial impacts, 3) mental health impacts, 4) communication sources, and 5) current resource gaps. In addition to collecting invaluable data to inform the public health response on Kauai, the CASPER was a tool to provide education and resources to participating households. Additionally, in light of COVID-19 coinciding with the 2020 Census, the CASPER was also used as an opportunity to assess census completion rates and barriers.

# METHODS

## CASPER Sampling Methodology

CASPER is a two-stage cluster sampling methodology. The first stage, cluster selection, begins with the determination of a sampling frame, or the area from which the sample is selected and to which the data is generalized. Once the sampling frame is determined, thirty census blocks (termed “clusters”), are randomly selected. The probability of a census block being selected is proportional to the number of housing units located within it.

The second sampling stage, household selection, is usually completed by survey teams in the field, with systematic selection of seven households per cluster. Homes are selected by dividing the total number of housing units (occupied or total, depending on the sampling frame) in the cluster by seven (the target number of surveys per cluster) to determine each cluster’s sequence number (“n”). Survey teams then attempt to interview every “nth” house, with an ultimate target of 210 surveys (30 clusters x 7 surveys per cluster).<sup>1</sup>

## Kauai COVID-19 CASPER Methodology

### Cluster and Household Selection

The sampling frame for this assessment was occupied housing units on the island of Kauai. 2010 census block data was used to select thirty clusters via random number generation. Kauai island has a total of 2,949 census blocks, 29,758 total housing units, 23,213 occupied housing units, and an estimated population of 72,000.<sup>2</sup> As a major tourist destination, many housing units are not occupied by Kauai residents and are classified as “vacant” in census data. To capture data representative of Kauai residents, cluster selection was completed using occupied housing unit data, reducing the likelihood of selecting clusters with primarily short-term vacation rentals.

Census data, including census block GIS shape files, total population, total housing units, and occupied housing units (all per census block) were downloaded via the United States Census webpage. Using a random number generator between 1 and 23,213 (the total occupied households on the island), thirty households were selected, and corresponding census blocks were chosen as survey clusters. Selected cluster shapefiles were layered over Google Maps satellite images, as displayed in Figure 1.

Survey planners utilized satellite imagery and Kauai County Real Property tax map data to pre-select households for participation. Within QGIS, random starting points were generated within each selected cluster. Researchers used these points, along with Kauai County tax parcel shapefiles, to enumerate housing units within each cluster. Counting

sequences were calculated by dividing the number of census-block specific occupied housing units by seven (referred to as “n”). Researchers continued through each cluster in a serpentine manner until seven participant households and five replacement households were selected. Survey teams were supplied with a detailed map of their cluster and their selected household addresses upon deployment. This methodology saved time in the field and improved efforts to include additional dwelling units (known as ohana units) that are typically hidden from street view, and therefore not counted during field enumeration processes.



**Figure 1.** Satellite imagery of census blocks randomly selected for survey participation.

### Questionnaire

The 2020 Kauai CASPER questionnaire was developed by the unified command and operations staff of the county’s COVID-19 incident management team (IMT). All questions were worded to collect household-level data since CASPER is a household-level survey technique. Forms were not translated to other languages, but survey teams were informed of how to request interpreter services from the operations team. To streamline data collection, surveys were collected in the field on tablets using the EpiCollect5 application while households followed along on a paper-based version.

### Training and Survey Teams

Survey teams were comprised of Department of Health staff with support from the Kauai Medical Reserve Corps and American Red Cross. All team members were required to attend remote and just-in-time training prior to survey deployment. Teams were briefed on common safety and security issues and were provided with an interview tip sheet and safety protocol developed by survey planners (Appendix C). Teams were paired so that each team had one member with prior CASPER experience and familiarity with the assigned cluster area. While surveying, teams drove state vehicles and wore green vests identifying them as members of the “Department of Health Survey Team” with state-issued ID badges.



## Community Notification

Numerous methods were utilized to notify the public of the COVID-19 CASPER survey, including an HDOH press release, radio advertisements on two stations, and County of Kauai social media postings. Notifications began the week prior to deployment to provide ample community notice. HDOH addressed concerns voiced by the community regarding the safety of conducting door-to-door surveys during mandatory stay-at-home orders by emphasizing how the survey protocol followed social distancing requirements and the ability for selected households to participate via phone.

## Survey Distribution

Between April 22-23, a total of eighteen survey teams conducted door-to-door surveys in the thirty randomly selected clusters. Teams were given a detailed map and list of the systematically selected households, a verbal consent script, a cluster-specific tracking sheet, referral forms, extra paper-based questionnaire forms, a copy of the press release describing the survey's objectives, and a tablet to collect electronic data. Copies of all documents were available for household distribution upon request and are provided in Appendices A-G. To be eligible to participate, respondents had to provide verbal consent, reside on the island at least four months per year, and be over the age of 18.

Survey teams wearing cloth face masks knocked on doors, backed up six feet, and obtained verbal consent from the household. Selected households were offered the opportunity to participate in a socially distanced outdoor interview or a phone interview. Each survey team was assigned a burner phone to complete surveys from the car after obtaining verbal consent from the household. For households who weren't home, survey teams dropped off letters after the initial visit with instructions to call the survey team back to conduct their interview via phone or to decline to participate.

Participants were given cloth face masks, drawstring backpacks, waterproof bags for storage of important documents, educational materials on COVID-19, and a list of available community resources. Households that declined to participate in the survey still received the waterproof bags for important document storage and all educational materials.



**Figure 2.** Materials (left) provided to survey teams (right) for CASPER survey dissemination.

## Data Entry and Analysis

Survey data were collected electronically via tablets using the EpiCollect 5 application. Entries were uploaded upon return to the operations center. Once synced, data was analyzed using Epi Info 7 software.

During analysis, each completed interview was assigned a weight based on the likelihood that household would have been selected for participation. Weighting each interview ensures the data is representative of the entire sampling frame, and results can be generalized to the island of Kauai.

# RESULTS

Survey teams reported that most households were willing to participate and grateful that HDOH was checking in to see how they were doing. The surveying process was much faster during COVID-19 than it has been during prior Kauai preparedness CASPERs. Teams were able to complete the surveys within the first two planned days and no teams were sent out on the final day. In the thirty clusters, survey teams attempted to contact 271 households, spoke with a resident at 212 households, and completed 189 interviews. Response rates are shown in Table 1.

**Table 1.** Calculated response rates for the Kauai COVID-19 CASPER (n=189).

Response Rates		Percent
Completion Rate	Represents percent of target number of surveys collected <i>(completed surveys/ target surveys)</i>	90.0
Cooperation Rate	Represents the willingness of the community to participate <i>(completed surveys/ total contacted households)</i>	89.2
Contact Rate	Represents the proportion of households where contact was attempted and interview completed <i>(completed surveys/ total attempted households)</i>	69.7

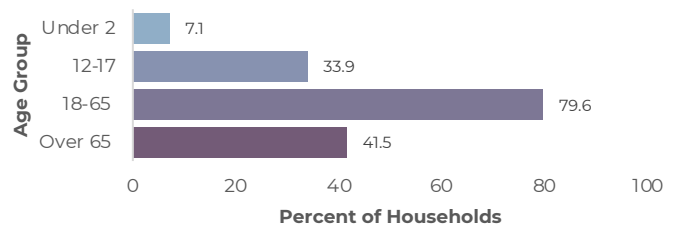
Interpreter services were available via telephone but not requested by selected households. Referral forms were completed for eight households who had immediate needs and referred to the operations team for follow-up related to WIC, SNAP, food bank locations, and state unemployment insurance issues. Survey results are grouped by subject matter and summarized in data figures and tables on the following pages.

Weighted and unweighted data with 95% confidence intervals are provided for responses with frequencies greater than or equal to 5. Responses with less than 5 observations are marked as “-” in the following charts. Data points discussed throughout this report refer to weighted data, ensuring representativeness of the entire sampling frame.

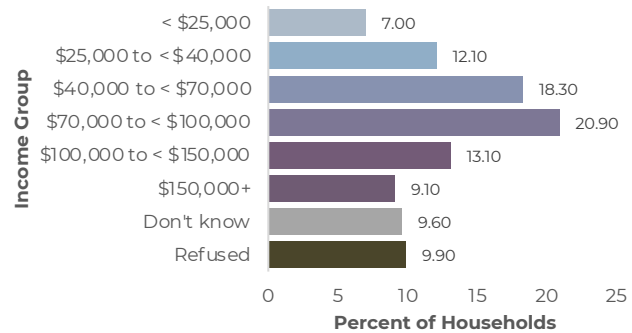
## Basic Household Information

The majority of Kauai households were owner-occupied (69%), with a mean and median household size of 3 and 2, respectively. Just over 1% of households had a member who was pregnant and 2% of households had a member who did not speak English. Languages reported other than English included Ilocano, Tagalog, Tongan, and Marshallese. 43% of households had a family member trained in first aid, CPR, or community emergency response team (CERT) in the past five years. Given the vulnerability of certain age groups to severe disease from SARS-CoV-2, the virus that causes COVID-19, surveyors asked about the ages of household members. 7% of Kauai households had at least one child under two years old and 42% of households had at least one adult over sixty-five years old (Figure 3).

Hawaii is an expensive place to live. Many households live paycheck to paycheck during normal times and are, therefore, extremely vulnerable to financial insecurity during a disaster. To assess financial vulnerability among residents, surveyors asked households to select a range for their 2019 combined household income. 23% of households indicated making less than \$40,000 in 2019, with half of those making less than \$25,000 (Figure 4).



**Figure 3.** Percent of Kauai households with household member(s) in each age group (n=23,213).



**Figure 4.** Percent of Kauai households within each 2019 combined household income range (n=23,213).

**Table 2.** Kauai COVID-19 CASPER basic household information survey questions with unweighted (n= 189) and weighted (n=23,213) results. Answer choices with less than five respondents were not weighted.

Question	Frequency	Percent Households	Projected Households	Weighted Percent	95% CI
<b>Basic Household Information</b>					
<b>Does your household own or rent this residence?</b>					
Own	130	68.8	16,006	<b>69.0</b>	(68.4, 69.5)
Rent	56	29.6	6,876	<b>29.6</b>	(29.0, 30.2)
Other	2	1.1	-	-	-
Don't know	1	0.5	-	-	-
<b>Is anyone in your household pregnant?</b>					
Yes	3	1.6	-	-	-
No	185	97.9	22,771	<b>98.1</b>	(97.9, 98.3)
Refused	1	0.5	-	-	-
<b>Is there an adult in your household that does not speak English?</b>					
Yes	4	2.1	-	-	-
No	185	97.9	22,727	<b>97.9</b>	(97.7, 98.1)
<b>In the past 5 years, has anyone in your household taken training in first aid, CPR, or community emergency response team?</b>					
Yes	81	42.9	9,923	<b>42.8</b>	(42.1, 43.2)
No	97	51.3	12,038	<b>51.9</b>	(51.2, 52.5)
Don't know	10	5.3	1,142	<b>4.3</b>	(3.7, 5.2)
Refused	1	0.5	-	-	-



## Health Status and COVID-19

Only 5% of Kauai households reported having a household member who had been tested for COVID-19, none of whom received a positive result. 4% reported that they had at least one family member who had been sick with what they thought was COVID-19 but didn't get tested.

However, most households reported that they are very concerned (37%) or somewhat concerned (33%) about their household members getting sick with COVID-19; this supports indications that the public is generally accepting of community mitigation measures implemented on Kauai. For example, most

households (98%) have cloth face masks and always (82%) wear them when out of the house.

In order to determine the percentage of households with a family member at high-risk of severe disease from COVID-19, households were asked whether they had members with the following conditions: moderate to severe asthma (16%), diabetes (15%), serious heart conditions (9%), immunosuppression (8%), chronic lung disease (3%), and/or chronic kidney disease (1.4%). Two-thirds of households (65%) reported that they do not have any members who fall into a high-risk medical group.

**Table 3.** Kauai COVID-19 CASPER health status and general COVID-19 survey questions with unweighted (n= 189) and weighted (n=23,213) results. Answer choices with less than five respondents were not weighted.

Question	Frequency	Percent Households	Projected Households	Weighted Percent	95% CI
<b>Health Status and COVID-19</b>					
<b>Has anyone in your household been tested for COVID-19?</b>					
Yes	9	4.8	1,159	<b>5.0</b>	(4.7, 5.3)
No	179	94.7	21,899	<b>94.3</b>	(94.0, 94.6)
Don't know	1	0.5	-	-	-
<b>If yes, did anyone test positive? (n=9)</b>					
Yes	0	-	-	-	-
No	9	100.0	1,159	<b>100.0</b>	(100.0)
<b>Has anyone in your household been sick and thought they had COVID-19 but didn't get tested?</b>					
Yes	9	4.3	967	<b>4.2</b>	(3.9, 4.5)
No	178	94.7	21,870	<b>94.9</b>	(94.6, 95.1)
Don't know	2	1.1	-	-	-
<b>How concerned are you about your household members getting sick with COVID-19?</b>					
Very concerned	71	37.6	8,690	<b>37.4</b>	(36.8, 38.1)
Somewhat concerned	61	32.3	7,581	<b>32.7</b>	(32.1, 33.3)
Not concerned	52	27.5	6,326	<b>27.3</b>	(26.7, 27.8)
Don't know	5	2.6	615	<b>2.7</b>	(2.5, 2.9)
<b>Do you have cloth masks for all or most household members to wear when out of the house?</b>					
Yes	185	97.9	22,734	<b>97.9</b>	(97.8, 98.1)
No	2	1.1	-	-	-
Don't know	2	1.1	-	-	-
<b>If yes, do household members wear cloth masks when they go out? (n=185)</b>					
Always	155	83.8	19,064	<b>82.1</b>	(81.6, 82.6)
Usually	23	12.4	2,896	<b>12.5</b>	(12.1, 12.9)
Sometimes	6	3.2	663	<b>2.9</b>	(2.7, 3.1)
Rarely	1	0.5	-	-	-
Never	0	0	-	-	-

Question	Frequency	Percent Households	Projected Households	Weighted Percent	95% CI
<b>Health Status and COVID-19</b>					
<b>Some individuals are at higher risk for severe disease from COVID-19. Do you or any of your household members have the following conditions?</b>					
Moderate to severe asthma	31	16.4	3,788	<b>16.3</b>	(15.9, 16.8)
Diabetes	30	15.9	3,486	<b>15.0</b>	(14.6, 15.5)
Serious heart conditions	17	9.0	2,012	<b>8.7</b>	(8.3, 9.0)
Immunocompromised	15	7.9	1,804	<b>7.8</b>	(7.4, 8.1)
Chronic lung disease	6	3.2	663	<b>2.9</b>	(2.7, 3.1)
Chronic kidney disease	3	1.6	-	-	-
Liver disease	1	0.5	-	-	-
None of the above	121	64.0	15,103	<b>65.1</b>	(64.5, 65.7)
Refused	1	0.5	-	-	-

## Mental Health Impacts of COVID-19

The mental health impacts of the COVID-19 pandemic are well acknowledged, but difficult to ascertain. One third of Kauai households (32%) reported at least one member who had experienced emotional distress related to the pandemic. While most households (61%) indicated that their current

stress level was low, 34% and 5% reported medium and high stress levels, respectively. While most households appear to be handling the pandemic okay, additional mental health resources and services should be offered for those households who are having a more difficult time coping.

**Table 4.** Kauai COVID-19 CASPER mental health impacts questions with unweighted (n= 189) and weighted (n=23,213) results. Answer choices with less than five respondents were not weighted.

Question	Frequency	Percent Households	Projected Households	Weighted Percent	95% CI
<b>Mental Health Impacts</b>					
<b>Have you or anyone in your household experienced emotional distress related to the coronavirus pandemic?</b>					
Yes	61	32.3	7,373	<b>31.8</b>	(31.2, 32.4)
No	125	66.1	15,472	<b>66.7</b>	(66.0, 67.3)
Don't know	3	1.6	-	-	-
<b>If yes, do you know where to seek help if you want it? (n=61)</b>					
Yes	48	78.7	5,746	<b>77.9</b>	(77.0, 78.9)
No	12	19.7	1,516	<b>20.6</b>	(19.7, 21.5)
Don't know	1	1.6	-	-	-
<b>How would you describe the current level of stress in your household?</b>					
High: close to the breaking point	10	5.3	1,231	<b>5.3</b>	
Medium: stressful but we're managing	65	34.4	7,806	<b>33.6</b>	
Low: we're good	113	59.8	14,048	<b>60.5</b>	
Don't know	1	0.5	-	-	

## Financial Impacts of COVID-19

### Unemployment

Stay at home orders have had wide consequences on the financial security of American households. On Kauai, more than half (57%) have at least one member who has lost their job as a result of the COVID-19 pandemic. While most of those households

(88%) knew how to apply for state unemployment benefits, many reported that they had issues with their application process and/or receiving benefits. At the time the survey was conducted, the Hawaii unemployment system was inundated with requests and many applicants had yet to receive a payout.



## Housing and Utilities

In order to protect homeowners and renters from foreclosure and eviction during the COVID-19 pandemic, federal and state housing legislation was enacted. However, even with these measures in place, a third of Kauai households remained very concerned (13%) or somewhat concerned (20%) about their ability to pay the next month's rent or mortgage. Of those who had requested assistance with housing payments, only 35% had received that assistance at the time of the survey. Additionally, although protections were in place to prevent households from having their utilities shutoff during the pandemic, over one quarter of households were very concerned (12%) or somewhat concerned (17%) about their ability to pay for basic utilities including water and electricity.

## Transportation and Food

Most households (95%) reported they did not have trouble paying for transportation in the prior month. Of those who had trouble, common difficulties included car payments (60%), insurance (50%), and fuel (40%). Most households (84%) have not had difficulty providing their food needs in the past 30 days. However, 12% have only been able to provide food for their household most of the time and 2% have had trouble feeding their household. One fifth of Kauai households have accessed community food assistance, including supplemental nutrition assistance program (SNAP, 9.5%), food banks (4%), food distribution program (5%, e.g. Kupuna Kart, Meals on Wheels, Malama Meals), or other programs (4%, e.g. work, community gardens, HUD, credit unions, and the payroll protection program (PPP)).

**Table 5.** Kauai COVID-19 CASPER financial impact survey questions with unweighted (n= 189) and weighted (n=23,213) results. Answer choices with less than five respondents were not weighted.

Question	Frequency	Percent Households	Projected Households	Weighted Percent	95% CI
<b>Financial Impacts of COVID-19</b>					
<b>Has anyone in your household lost their job or income as a result of the COVID-19 pandemic?</b>					
Yes	110	58.2	13,165	<b>56.7</b>	(56.1, 57.4)
No	77	40.7	9,808	<b>42.5</b>	(41.6, 42.9)
Don't know	1	0.5	-	-	-
Refused	1	0.5	-	-	-
<b>If yes, does someone in your household know how to apply for unemployment benefits? (n=110)</b>					
Yes	97	88.2	11,538	<b>87.6</b>	(87.1, 88.2)
No	10	9.1	1,295	<b>9.8</b>	(9.3, 10.4)
Don't know	3	2.7	-	-	-
<b>How concerned are you about your household's ability to pay the next month's rent or mortgage?</b>					
Very concerned	25	13.2	3,110	<b>13.4</b>	(13.0, 13.8)
Somewhat concerned	39	20.6	4,714	<b>20.3</b>	(19.8, 20.8)
Not concerned	123	65.1	15,168	<b>65.3</b>	(64.7, 66.0)
Refused	2	1.1	-	-	-
<b>Has your household requested any assistance with housing expenses?</b>					
Yes	13	6.9	1,564	<b>6.7</b>	(6.4, 7.1)
No	175	92.6	21,538	<b>92.8</b>	(92.5, 93.1)
Refused	1	0.5	-	-	-
<b>If yes, has your household received any assistance? (n=13)</b>					
Yes	5	38.5	553	<b>35.3</b>	(33.0, 37.7)
No	8	61.5	1,011	<b>64.7</b>	(62.3, 67.0)
<b>How concerned are you about your household's ability to pay for basic utilities like water or electricity?</b>					
Very concerned	23	12.2	2,813	<b>12.1</b>	(11.7, 12.6)
Somewhat concerned	32	16.9	3,915	<b>16.9</b>	(16.4, 17.4)
Not concerned	133	70.4	16,374	<b>70.5</b>	(70.0, 71.1)
Refused	1	0.5	-	-	-

Question	Frequency	Percent Households	Projected Households	Weighted Percent	95% CI
<b>Financial Impacts of COVID-19</b>					
<b>In the last month, have you or anyone in your household had a hard time paying for transportation?</b>					
Yes	10	5.3	1,105	<b>4.8</b>	(4.5, 5.0)
No	178	94.2	21,997	<b>94.8</b>	(94.5, 95.0)
Refused	1	0.5	-	-	-
<b>If yes, which of the following? (n=10)</b>					
Car payments	6	60.0	663	<b>60.0</b>	(57.1, 62.9)
Car insurance	5	50.0	553	<b>50.0</b>	(47.1, 52.9)
Gas/ diesel fuel	4	40.0	-	-	-
Car repairs	2	20.0	-	-	-
Bus fare	1	10.0	-	-	-
<b>In the last 30 days, have you had enough money to meet your household's food needs?</b>					
Yes, all the time	158	83.6	19,492	<b>84.0</b>	(83.5, 84.4)
Most of the time	23	12.2	2,800	<b>12.1</b>	(11.7, 12.5)
No, we've had trouble feeding the household	4	2.1	-	-	-
Other	2	1.1	-	-	-
<b>Which of the following community resources has your household received?</b>					
SNAP	18	9.5	2,205	<b>9.5</b>	(9.1, 9.9)
Food distribution program	9	4.8	1,115	<b>4.8</b>	(4.5, 5.1)
Food bank	9	2.8	1,013	<b>4.4</b>	(4.1, 4.6)
WIC	1	0.5	-	-	-
Other	8	4.2	991	<b>4.3</b>	(4.0, 4.5)
None of the above	153	81.0	18,900	<b>81.4</b>	(80.9, 81.9)

## Communication Sources and Gaps

Households were asked how and where they seek information related to COVID-19 in order to better enable the county and state to push accurate and timely information through trusted sources. Most households on Kauai have cellular phone (98%) and internet access (89%), while only 36% still have a landline telephone.

### Sources of Information

The most common sources of information related to COVID-19, included: internet (84%), television (69%), the County of Kauai (48%), newspaper (34%), and local radio (28%). Only 22% of households indicated that one of their top three sources of information related to COVID-19 was the Hawaii State Department of Health. However, this does represent

a significant increase over rates reported from 2017-2019 (2-3%) when households were asked about their primary sources of health-related information. This supports prior assumptions that our residents are more likely to use HDOH as a resource during a public health emergency.

The majority (80%) of households were familiar with the Kauai Emergency Management Agency's COVID-19 website, where they can access information and materials specific to Kauai. This represents a significant increase over the 49% of households who reported familiarity with the KEMA website during the 2019 preparedness CASPER. This indicates that the KEMA COVID-19 page is a familiar and well-used resource for our residents.

**Table 6.** Kauai COVID-19 CASPER communication sources and gaps survey questions with unweighted (n= 189) and weighted (n=23,213) results. Answer choices with less than five respondents were not weighted.

Question	Frequency	Percent Households	Projected Households	Weighted Percent	95% CI
<b>Communication Sources &amp; Gaps</b>					
<b>Does your household have the following:</b>					
Landline telephone	67	35.4	8,397	<b>36.2</b>	(35.6, 36.8)
Cellular phone	185	97.9	22,771	<b>98.1</b>	(97.9, 98.3)
Internet access	167	88.4	20,612	<b>88.8</b>	(88.4, 89.2)



Question	Frequency	Percent Households	Projected Households	Weighted Percent	95% CI
<b>Communication Sources and Gaps</b>					
<b>Where does your household go for information related to the COVID-19 pandemic? (maximum 3 responses)</b>					
Internet	158	83.6	19,517	<b>84.1</b>	(83.6, 84.5)
Television	130	68.8	15,999	<b>68.9</b>	(68.3, 69.5)
County of Kauai	89	47.1	11,057	<b>47.6</b>	(47.0, 48.3)
Newspaper	61	32.3	7,865	<b>33.9</b>	(33.3, 34.5)
Local radio	50	26.5	6,391	<b>27.5</b>	(27.0, 28.1)
Friends and family	45	23.8	4,480	<b>24.0</b>	(23.5, 24.6)
Department of Health	39	20.6	5,024	<b>37.4</b>	(36.8, 38.1)
Word of mouth	29	15.3	3,769	<b>16.2</b>	(15.8, 16.7)
Health care provider	26	13.8	3,548	<b>15.3</b>	(14.8, 15.8)
Other	4	2.1	-	-	-
<b>Is your household familiar with the Kauai Emergency Management Agency's COVID-19 website, where you can access materials and information and specific to Kauai?</b>					
Yes	151	79.9	18,604	<b>80.1</b>	(79.6, 80.7)
No	38	20.1	4,609	<b>19.9</b>	(19.4, 20.4)

## Other Needs

### Additional Information

While most households (70%) indicated that they had access to the information they needed regarding COVID-19, 18% of households wanted additional information on how and/or when to get tested and 9% wanted additional information on disease prevention measures and signs/symptoms.

### 2020 Census

Accurate census data will be critically important to accessing federal resources as the community heads into the long-term recovery phase of the pandemic. Most households (62%) had completed the census at the time the survey was conducted. Among those who hadn't, most hadn't gotten around to it (45%), hadn't received it (37%) or didn't know how/needed assistance to complete it (16%).

### Further Questions and Referrals

Towards the end of the survey, participants were asked whether they had concerns not discussed during the survey. Of the 14% who answered yes, concerns focused on adherence to the 14-day quarantine imposed on all arriving residents and visitors; when restrictions would be lifted; long-term employment and income impacts; and interruptions to daily activities from the state's stay at home order.

8% of participating households asked the survey team to complete a referral form for the Department of Health to contact them about unmet needs. These referrals primarily focused on assistance with government-run social service resources such as WIC, SNAP, MedQUEST, and Hawaii Unemployment Insurance (UI).

**Table 7.** Kauai COVID-19 CASPER other needs survey questions with unweighted (n= 189) and weighted (n=23,213) results. Answer choices with less than five respondents were not weighted.

Question	Frequency	Percent Households	Projected Households	Weighted Percent	95% CI
<b>Other Needs</b>					
<b>What additional information would your household like to know about COVID-19?</b>					
How and/or when to get tested	33	17.5	4,164	<b>17.9</b>	(17.5, 18.4)
Prevention measures	17	9.0	2,220	<b>9.6</b>	(9.2, 10.0)
How you get it	16	8.5	2,071	<b>8.9</b>	(8.6, 9.3)
Signs and symptoms	16	8.5	2,154	<b>9.3</b>	(8.9, 9.7)
Other	16	8.5	1,940	<b>8.4</b>	(8.0, 8.7)
Don't know	4	2.1	-	-	-
We don't need additional information	132	69.8	15,997	<b>68.9</b>	(68.3, 69.5)

Question	Frequency	Percent Households	Projected Households	Weighted Percent	95% CI
<b>Other Needs</b>					
<b>Has your household completed the census?</b>					
Yes	117	61.9	14,287	<b>61.6</b>	(60.9, 62.2)
No	64	33.9	7,835	<b>33.8</b>	(33.2, 34.4)
Don't know	8	4.2	1,091	<b>4.7</b>	(4.4, 5.0)
<b>If no, why not? (n=63)</b>					
Haven't gotten around to it	29	46.0	3,449	<b>44.8</b>	(43.7, 45.9)
Haven't received it	23	36.5	2,839	<b>36.8</b>	(35.8, 37.9)
Don't know how/ need help	9	14.3	1,198	<b>15.5</b>	(14.8, 16.4)
Other	1	1.6	-	-	-
Don't know	1	1.6	-	-	-
<b>Does your household have any concerns or needs not already mentioned?</b>					
Yes	27	14.3	3,300	<b>14.2</b>	(13.8, 14.7)
No	162	85.7	19,913	<b>85.8</b>	(85.3, 86.2)
<b>Finally, would you like to have someone from the health department contact you about any needs in these difficult times?</b>					
Yes	14	7.4	1,758	<b>7.6</b>	(7.2, 7.9)
No	170	89.9	20,759	<b>89.4</b>	(89.0, 89.8)
Don't know	5	2.6	696	<b>3.0</b>	(2.8, 3.2)

## DISCUSSION

Conducting annual preparedness CASPERs from 2017-2019 was an enormous capacity building exercise for the Department of Health and partner agencies, allowing collaboration across programmatic silos while providing valuable outreach and education opportunities. Having developed this capacity during blue skies, allowed us to rapidly deploy survey teams to assess health needs on the ground during an unprecedented global public health emergency.

The 2020 Kauai CASPER collected invaluable data about the impact of the COVID-19 pandemic on Kauai households. This information is being used to inform state and county emergency response operations, as well as to enable the Department of Health and County of Kauai to better meet the community's health and other resource needs throughout the next few months. Final recommendations based on the data collected are detailed in the following section.

### Recommendations

Based on results from the 2020 Kauai COVID-19 CASPER, final recommendations are listed below.

- 1. A third of Kauai households (34%) have at least one member at high risk of severe disease from SARS-CoV-2, the virus that causes the disease COVID-19.**

Due to the vulnerability of many of our residents,

and the limited ability to surge our health care capacity, a cautious approach to reopening is advised. Currently, the reliability of PCR and antibody tests are inadequate to enable reopening tourism without risking a second wave of infections. Our reopening strategy needs to be transparent and simple, clearly explaining how and when we will tighten back up. To mitigate risk of infection, the state should consider targeted food and essential item delivery programs to high risk individuals, including those over seventy years of age and those with serious underlying health conditions, while emphasizing the importance of safer-at-home recommendations. Messaging to high-risk groups, encouraging limiting their outings and exposure to others, should be prioritized by the state and county.

- 2. Less than 5% of households reported that a member had been tested for COVID-19; none of those received a positive result. Only 4.3% of households indicated that a member had been sick with what they thought was COVID-19 but didn't get tested.**

This data suggests that residents know when and how to get tested for COVID-19 and further supports the disease trends we have seen over the past few months on Kauai, with no new cases since mid-April. As restrictions are lifted and businesses start to re-open, HDOH must continue to emphasize the importance of staying home when sick and how and when to get tested. The ability to identify, isolate, trace, and quarantine close contacts is essential to ensuring we do not have a second wave of infections that overwhelms our health care system. Additional capacity for contact tracing and disease investigation should be developed through the training of further HDOH staff and KMRC volunteers.



Active surveillance, including frequent testing of those in high-risk congregate settings such as long-term care and correctional facilities, should be implemented immediately.

- 3. Most Kauai households appear stable in terms of housing, basic utilities, and food access. However, 34% of households reported that they are very concerned or somewhat concerned about their ability to pay the next month's rent or mortgage, 29% are very concerned or somewhat concerned about their ability to pay for basic utilities, 5% are having trouble paying for transportation, and 19% of households indicated they had received some type of community food assistance in the past thirty days.**

Anecdotal reports from survey teams indicate that while most households are currently able to meet their basic needs, they are very concerned for their continued ability to do so over the next few months. A significant contributing factor to this is continued delays in state unemployment benefits. 57% of Kauai households have a member who has lost their job as a result of the pandemic. While the majority (88%) of those households reported that they knew how to apply for unemployment, many reported difficulty with the application process and/or receiving benefits. The Kauai CASPER survey did not dig as deeply into this topic as it should have, making it difficult to tease out what the access issues are. However, one CASPER survey team member reported in their participant feedback form that of the six households where respondents indicated they had applied for unemployment benefits with the state, only one had received a payment.

The state unemployment system is antiquated and overwhelmed by the sudden rise in applicants. More state resources and personnel must be directed to this area. The most immediate and effective way to assist Hawaii families is through direct provision of cash payments. Issues regarding access to unemployment benefits should be further explored

through CASPER or other tools. As a state with a high percentage of its working population in the tourism sector, and the uncertainty regarding when it will be safe to reopen this sector of our economy, the state should focus on how to meet the resource needs of this group through job development or additional unemployment benefits. As the response shifts from disease control towards the provision of much-needed resources and support systems, the state should consider the development of a temporary workforce program focused on infrastructure improvements and conservation projects for individuals who are unable to be rehired into a diminished tourism sector.

- 4. The pandemic has placed enormous economic strain on American households. Economic strain often carries over into direct effects on the mental health of our community. On Kauai, one third of households (32%) indicated they had experienced emotional distress related to the pandemic. Of those, 21% did not know where to seek help if they needed it. Stress levels in Kauai households varied, with 5% reporting high, 34% medium, and 60% low stress.**

Although most Kauai households seem to be weathering the pandemic moderately well, 5% reported their stress level as high - near the breaking point. Mental health resources have been chronically underserved on Kauai where relatively high rates of suicide and behavioral health needs are a long-standing problem, as in many rural counties. Kauai suffered four suicides in the beginning of May, which has drawn increased attention to this issue. HDOH, mental health service providers, and the county need to continue to work together on strategies to improve access to culturally appropriate, affordable behavioral health services, including non-traditional approaches like tele-health visits. Given the uncertainty regarding the resolution of the COVID-19 pandemic and our economic recovery, we are likely to see continued mental health impacts over the following months and potentially years.



## Limitations

CASPER methodology is based on the systematic selection of households within randomly selected census blocks. For the purposes of the 2019 Kauai CASPER, 2010 U.S. Census Bureau data was used as the most recent data available. The island of Kauai has experienced significant growth since the 2010 census was conducted, and the total number of occupied households used for the weighting and data analyses is, therefore, out of date. Changes to the overall number, composition, and geographic location of occupied housing units is not reflected in the data used for census block and household selection processes.

Survey teams had to replace some systematically selected households after three attempts with no answer, household refusal, household inaccessibility, or household ineligibility (not a full-time resident). Replacement of selected households could affect the representativeness of the data.

Certain high-risk groups, particularly houseless individuals and those living in congregate settings such as long-term care and correctional facilities, are excluded by CASPER's census block and household selection method. These high-risk individuals will have greater resource needs and different barriers to accessing testing and care than those living in residential settings better captured by census block data. Emergency planners should take this into account when using this data to inform response operations.

## References

1. CASPER methodology overview | CDC.  
<https://www.cdc.gov/nceh/hsb/disaster/casper/overview.htm>. June 4, 2019.
2. Bureau USC. American FactFinder - Community Facts: Kauai County, HI.  
[https://factfinder.census.gov/bkmk/cf/1.0/en/county/Kauai County, Hawaii/POPULATION/PEP\\_EST](https://factfinder.census.gov/bkmk/cf/1.0/en/county/Kauai County, Hawaii/POPULATION/PEP_EST)

Images were accessed through the Kauai District Health Office's Canva subscription service.



# APPENDIX A

To be completed by team BEFORE the interview											
Date (MM/DD/YY):	Cluster Number:	Survey Number:	Survey Team Members:								
First, we would like to ask about basic household information											
<p><b>Q1.</b> Including yourself, how many people live in your household? _____</p> <p>Of those, how many are:</p> <table border="1"> <tr> <td>Less than 2 years old</td> <td></td> </tr> <tr> <td>2-17 years old</td> <td></td> </tr> <tr> <td>18-65 years old</td> <td></td> </tr> <tr> <td>More than 65 years old</td> <td></td> </tr> </table> <p><input type="checkbox"/> Don't know   <input type="checkbox"/> Refused</p>	Less than 2 years old		2-17 years old		18-65 years old		More than 65 years old		<p><b>Q4.</b> Which of the following does your household have? (Check all that apply)</p> <p><input type="checkbox"/> Landline telephone  <input type="checkbox"/> Cellular phone  <input type="checkbox"/> Internet access  <input type="checkbox"/> None of the above  <input type="checkbox"/> DK  <input type="checkbox"/> Refused</p>	<p><b>Q6.</b> Is there an adult in your household who does not speak English?  <input type="checkbox"/> Yes   <input type="checkbox"/> No   <input type="checkbox"/> DK   <input type="checkbox"/> Refused</p> <p><b>Q6.a</b> If yes, what language(s) do they speak?            _____</p>	
Less than 2 years old											
2-17 years old											
18-65 years old											
More than 65 years old											
<p><b>Q2.</b> Does your household own or rent this residence?  <input type="checkbox"/> Own   <input type="checkbox"/> Rent   <input type="checkbox"/> Other   <input type="checkbox"/> DK   <input type="checkbox"/> Refused</p>	<p><b>Q5.</b> In the past 5 years, has anyone in your household taken training in first aid, CPR, or community emergency response team (CERT)?  <input type="checkbox"/> Yes   <input type="checkbox"/> No   <input type="checkbox"/> DK   <input type="checkbox"/> Refused</p>	<p><b>Q7.</b> Which range best describes your annual household income from all sources (before taxes) in 2019?  <input type="checkbox"/> Less than \$25,000  <input type="checkbox"/> \$25,000 to less than \$40,000  <input type="checkbox"/> \$40,000 to less than \$70,000  <input type="checkbox"/> \$70,000 to less than \$100,000  <input type="checkbox"/> \$100,000 to less than \$150,000  <input type="checkbox"/> \$150,000 or more  <input type="checkbox"/> Don't know  <input type="checkbox"/> Refused</p>									
<p><b>Q3.</b> Is anyone in your household pregnant?  <input type="checkbox"/> Yes   <input type="checkbox"/> No   <input type="checkbox"/> DK   <input type="checkbox"/> Refused</p>											
Next, we would like to ask you some general questions about the coronavirus pandemic											
<p><b>Q8.</b> Has anyone in your household been tested for COVID-19?  <input type="checkbox"/> Yes   <input type="checkbox"/> No   <input type="checkbox"/> DK   <input type="checkbox"/> Refused</p> <p><b>Q8.a</b> If yes, did anyone test positive?  <input type="checkbox"/> Yes   <input type="checkbox"/> No   <input type="checkbox"/> DK   <input type="checkbox"/> Refused</p> <p>If no to Q8 or Q8a, has anyone been sick and thought they had COVID-19 but didn't get tested?  <input type="checkbox"/> Yes   <input type="checkbox"/> No   <input type="checkbox"/> DK   <input type="checkbox"/> Refused</p>	<p><b>Q12.</b> Where does your household go for information related to the COVID-19 pandemic? (Choose up to three responses)  <input type="checkbox"/> Friends &amp; family  <input type="checkbox"/> Internet  <input type="checkbox"/> TV  <input type="checkbox"/> Local radio  <input type="checkbox"/> Health care provider  <input type="checkbox"/> Department of Health  <input type="checkbox"/> County of Kauai  <input type="checkbox"/> Newspaper  <input type="checkbox"/> Word of mouth (coconut wireless)  <input type="checkbox"/> Other _____  <input type="checkbox"/> Don't know  <input type="checkbox"/> Refused</p>	<p><b>Q15.</b> Some individuals are at higher risk for severe disease from COVID-19. Do you or any of your household members have the following conditions? (Check all that apply)  <input type="checkbox"/> Chronic lung disease  <input type="checkbox"/> Moderate to severe asthma  <input type="checkbox"/> Serious heart conditions  <input type="checkbox"/> Diabetes  <input type="checkbox"/> Chronic kidney disease  <input type="checkbox"/> Liver disease  <input type="checkbox"/> Immunocompromised  <input type="checkbox"/> None of the above  <input type="checkbox"/> Don't know  <input type="checkbox"/> Refused</p>									
<p><b>Q9.</b> How concerned are you about your household members getting sick with COVID-19?  <input type="checkbox"/> Very concerned  <input type="checkbox"/> Somewhat concerned  <input type="checkbox"/> Not concerned  <input type="checkbox"/> Don't know  <input type="checkbox"/> Refused</p>	<p><b>Q13.</b> Is your household familiar with the Kauai Emergency Management Agency's COVID-19 website <a href="http://www.kauai.gov/covid-19">www.kauai.gov/covid-19</a> where you can access information and materials specific to Kauai?  <input type="checkbox"/> Yes   <input type="checkbox"/> No   <input type="checkbox"/> DK   <input type="checkbox"/> Refused</p>	<p><b>Q16.</b> Do you have cloth masks for all or most household members to wear when out of the house?  <input type="checkbox"/> Yes   <input type="checkbox"/> No   <input type="checkbox"/> DK   <input type="checkbox"/> Refused</p>									
<p><b>Q10.</b> Have you or anyone in your household experienced emotional distress related to the coronavirus pandemic?  <input type="checkbox"/> Yes   <input type="checkbox"/> No   <input type="checkbox"/> DK   <input type="checkbox"/> Refused</p> <p><b>Q10.a</b> If yes, do you know where to seek help if you want it?  <input type="checkbox"/> Yes   <input type="checkbox"/> No   <input type="checkbox"/> DK   <input type="checkbox"/> Refused</p>	<p><b>Q14.</b> What additional information would your household like to know about COVID-19? (Check all that apply)  <input type="checkbox"/> How you get it  <input type="checkbox"/> Signs and symptoms  <input type="checkbox"/> How and/or when to get tested  <input type="checkbox"/> Prevention  <input type="checkbox"/> Other _____  <input type="checkbox"/> We don't need additional information  <input type="checkbox"/> Don't know  <input type="checkbox"/> Refused</p>	<p><b>Q16.a</b> If yes, do household members wear cloth masks when they go out?  <input type="checkbox"/> Always  <input type="checkbox"/> Usually  <input type="checkbox"/> Sometimes  <input type="checkbox"/> Rarely  <input type="checkbox"/> Never  <input type="checkbox"/> Don't know  <input type="checkbox"/> Refused</p>									
<p><b>Q11.</b> How would you describe the current level of stress in your household?  <input type="checkbox"/> High: close to the breaking point  <input type="checkbox"/> Medium: stressful but we're managing  <input type="checkbox"/> Low: we're good  <input type="checkbox"/> Don't know  <input type="checkbox"/> Refused</p>											



Finally, we would like to ask you about the pandemic's financial impact on your household		
<p><b>Q17.</b> Has anyone in your household lost their job or income as a result of the COVID-19 pandemic? <i>(Note for survey taker: Includes loss of business or customers, being laid off, having hours cut, employer closing business or cutting staff, furloughs, etc.)</i></p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> DK <input type="checkbox"/> Refused</p> <p><b>Q17.a</b> If yes, does someone in your household know how to apply for unemployment benefits?</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> DK <input type="checkbox"/> Refused</p>	<p><b>Q21.</b> In the last month, have you or anyone in your household had a hard time paying for transportation?</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> DK <input type="checkbox"/> Refused</p> <p><b>Q21.a</b> If yes, which of the following? (Check all that apply)</p> <p><input type="checkbox"/> Bus fare  <input type="checkbox"/> Gas or diesel fuel  <input type="checkbox"/> Car repairs  <input type="checkbox"/> Car insurance  <input type="checkbox"/> Car payments  <input type="checkbox"/> Other _____  <input type="checkbox"/> Don't know  <input type="checkbox"/> Refused</p>	<p><b>Q24.</b> Has your household completed the census yet?</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> DK <input type="checkbox"/> Refused</p> <p><b>Q24.a</b> If no, why not?</p> <p><input type="checkbox"/> Haven't received it  <input type="checkbox"/> Haven't gotten around to it  <input type="checkbox"/> Don't know how/need help  <input type="checkbox"/> Don't want to/don't plan to  <input type="checkbox"/> Other _____  <input type="checkbox"/> Don't know  <input type="checkbox"/> Refused</p>
<p><b>Q18.</b> How concerned are you about your household's ability to pay the next month's rent or mortgage?</p> <p><input type="checkbox"/> Very concerned  <input type="checkbox"/> Somewhat concerned  <input type="checkbox"/> Not concerned  <input type="checkbox"/> Don't know  <input type="checkbox"/> Refused</p>	<p><b>Q22.</b> In the last 30 days, have you had enough money to meet your household's food needs?</p> <p><input type="checkbox"/> Yes, all the time  <input type="checkbox"/> Most of the time  <input type="checkbox"/> No, we've had trouble feeding the household  <input type="checkbox"/> Other _____  <input type="checkbox"/> Don't know  <input type="checkbox"/> Refused</p>	<p><b>Q25.</b> Does your household have any concerns or needs that we have not already mentioned?</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> DK <input type="checkbox"/> Refused</p> <p><b>Q25.a</b> If yes, please specify          _____</p>
<p><b>Q19.</b> Has your household requested any assistance with housing expenses?</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> DK <input type="checkbox"/> Refused</p> <p><b>Q19.a</b> If yes, has your household received any assistance?</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> DK <input type="checkbox"/> Refused</p>	<p><b>Q23.</b> Which of the following community resources has your household received? (Check all that apply)</p> <p><input type="checkbox"/> Food bank  <input type="checkbox"/> Food distribution program              (Kupuna kart, Meals on Wheels)  <input type="checkbox"/> SNAP  <input type="checkbox"/> WIC  <input type="checkbox"/> Other _____  <input type="checkbox"/> None of the above  <input type="checkbox"/> Don't know  <input type="checkbox"/> Refused</p>	<p><b>Q26.</b> Finally, would you like to have someone from the health department contact you about any needs in these difficult times?</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> DK <input type="checkbox"/> Refused  <i>(If yes, fill out referral form)</i></p>
<p><b>Q20.</b> How concerned are you about your household's ability to pay for basic utilities like water or electricity?</p> <p><input type="checkbox"/> Very concerned  <input type="checkbox"/> Somewhat concerned  <input type="checkbox"/> Not concerned  <input type="checkbox"/> Don't know  <input type="checkbox"/> Refused</p>		

## APPENDIX B



### DEPARTMENT OF HEALTH

**DAVID Y. IGE**  
GOVERNOR

**BRUCE S. ANDERSON, Ph.D.**  
DIRECTOR

#### FOR IMMEDIATE RELEASE

April 16, 2020

20-032

### **Kaua'i District Health Office to conduct survey to assess COVID-19 Impact on Kaua'i Households**

HONOLULU -- The Hawai'i Department of Health's (DOH) Kaua'i District Health Office (KDHO) will conduct a Community Assessment for Public Health Emergency Response, known as a CASPER survey to assess the impact of the COVID-19 pandemic on Kaua'i households.

Survey teams will go door-to-door, April 22-24, to 30 census tracts that are weighted towards more populated areas within the county. Seven houses within each tract will be systematically selected and surveyed. Survey teams are comprised of DOH staff with support from the Kaua'i Emergency Management Agency, Kaua'i Medical Reserve Corps, and the American Red Cross. Teams will be wearing personal protective equipment (PPE) and social distancing will be observed. Participating households can complete the survey over the phone, if preferred.

"We greatly appreciate the participation of Kaua'i residents in this effort to assess the impact of the COVID-19 pandemic and immediate needs of our community," said Kaua'i District Health Officer Dr. Janet Berreman.

Selected households will be asked about their knowledge, attitudes, and practices related to COVID-19, as well as the financial and mental health impacts on people in their households. Team members will have on vests identifying themselves as part of the DOH-CASPER survey team and will carry identification cards. All survey responses are confidential, and names and addresses won't be collected.

The CASPER survey methodology was developed by the Centers for Disease Control and Prevention (CDC) as a way to rapidly assess the health and other resource needs of a

community after a disaster. The data gathered will help the County of Kaua'i and Department of Health meet the immediate needs of Kaua'i families.

If you have questions about the CASPER survey, please call:

**Lauren Guest**  
**Hawai'i State Department of Health**  
**Public Health Preparedness Planner**  
**Kaua'i District Health Office**  
**(808) 241-3496**

**# # #**

# APPENDIX C



## Hawaii CASPER Interview Tips



### **BEFORE THE INTERVIEW**

- Practice with your partner
- Dress appropriately: comfortable clothing; closed-toed shoes; vest & ID
- Assign roles (e.g. driving, navigating, interviewing, etc.)

### **DURING THE INTERVIEW**

- Introduce yourself
- Show empathy and respect
- Remind respondents that their responses are confidential and participation voluntary

### **ENDING THE INTERVIEW**

- Look over the entire questionnaire for completeness
- Thank the respondent and provide pre-filled blue backpack
- Complete referral form when necessary

### **DOS AND DON'TS OF STANDARDIZATION**

- **DO** ask the questions in the **same order** with the **exact wording**
- **DO** read the entire question
- **DO** record answers verbatim
- If respondent needs clarification, **repeat the question first**. If he/she still needs clarification, make sure that you are not changing the nature of the question.
- **DON'T** rephrase questions
- **DON'T** pre-fill answers
- **DON'T** try to finish the respondent's sentences

### **TRACKING FORM**

- Used for tracking **every** household sampled (this means every house you attempt an interview at)
- Each cluster collected on a separate tracking form
- Allows for calculation of response rates - it is **very important** that it is correct and complete
- If necessary, write information to identify households to return to or any notes that you may need to take (e.g., why the household is inaccessible) on the back of the form

### **SYSTEMATIC SAMPLING OF HOUSEHOLDS**

- Begin surveying at random starting point in cluster
- If specific interview addresses are not provided, select the nearest house and begin counting
- When you reach your first nth house (calculated by dividing households in cluster by 7), attempt an interview
- Complete tracking form **at every nth house** to indicate if interview was successful or if another attempt/replacement is needed
- Continue in serpentine manner, stopping at every nth house
- **Apartments/Condos/High Rises**: Count each apartment and condo units as individual houses
- **Commercial Buildings/Hotels**: Do not count commercial buildings or hotels when counting every nth house - these are not eligible for CASPER participation
- **Replacement**: Households can only be replaced if they meet one or more of the following categories:
  - 1) inaccessible,
  - 2) vacant,
  - 3) household refuses, or
  - 4) three attempts have been made with no answer

**Call OPS with questions related to sampling or replacement.**

### **SURVEY TIPS**

#### *Paper Survey Forms*

- Ensure before departing after every interview that questionnaire form is complete (including administrative information at top of each form)

### **SURVEY TIPS**

#### *All Forms*

- Begin survey following verbal consent
  - If household not accessible or refuses, note on tracking sheet (if refusal, provide important document bag to household)
- Note which survey number corresponds to which household on tracking sheet
- If helpful, present survey (on tablet or paper) to households to read along with survey team
- Indicate any issues on tracking form for review

### **SURVEY TIPS**

#### *Electronic Survey Forms*

- Ensure tablets are charged before departure
  - Tablet passcode: 101010
  - Electronic application: EpiCollect 5
- Save each survey entry following completion
- Upload data upon return to command center each day

Questions or concerns? Contact OPS: 808-241-3555.



## APPENDIX D

# COVID19 CASPER PROTOCOL



# 1



### FOLLOW PROPER SAFETY MEASURES

Wear your mask when driving and approaching households. Use provided hand sanitizer and gloves.

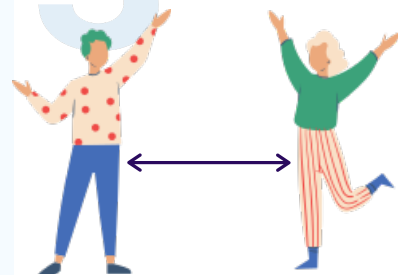
# 2



### KNOCK ON SELECTED HOUSEHOLD'S DOOR

Attempt households three times before replacing, unless the home is inaccessible or vacant.

# 3



### BACK UP TO MAINTAIN PHYSICAL DISTANCING

Maintain at least 6 feet of distance between yourself and selected households while interviewing.

# 4



### OBTAIN VERBAL CONSENT TO SURVEY

Similar to other surveys introduce yourself and ask if the household is willing to participate in the survey.

# 5



### OFFER TO COMPLETE SURVEY VIA PHONE

If the household prefers, provide the team's phone number and conduct the survey from the car.

# 6



### PROVIDE FOLLOW UP INFORMATION

If a household does not answer the door, leave a follow up form with your team's phone number.

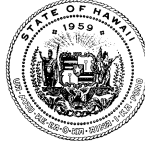
Kauai District Health Office



Questions? 808-241-3555

# APPENDIX E

DAVID Y. IGE  
GOVERNOR OF HAWAII



STATE OF HAWAII  
DEPARTMENT OF HEALTH  
KAUAI DISTRICT HEALTH OFFICE  
3040 UMI STREET  
LIHUE, HAWAII 96766

BRUCE S. ANDERSON, Ph.D.  
DIRECTOR OF HEALTH

JANET M. BERREMAN, M.D., M.P.H., F.A.A.P.  
DISTRICT HEALTH OFFICER

## Community Assessment for Public Health Emergency Response

Hello, we are \_\_\_\_\_ and \_\_\_\_\_ with the Department of Health. We have some information we would like to leave with you related to the coronavirus pandemic.

We are also doing a survey to help us understand island needs during this time. Your house was randomly selected to participate, and the survey will take about 10 minutes. The survey may be conducted by phone if you prefer. It is completely anonymous — we will not collect your name or address. Do you have a few minutes to complete the survey?

*[WAIT FOR RESPONDENT TO CLEARLY ANSWER **YES** OR **NO**].*

*[IF **NO**, THANK THEM FOR THEIR TIME.]* Thank you very much for your time. Here is some information you might find useful.

*[IF **YES**, CONTINUE.]* Thank you so much. Would you prefer to conduct the survey outside practicing social distancing or over the phone?

*[IF **IN-PERSON**, ASK THE RESPONDING HOUSEHOLD MEMBER TO PUT ON A MASK. IF THEY DON'T HAVE A MASK, TELL THEM TO USE THE ONE IN THE RESOURCE BAG YOU ARE GIVING THEM. MAKE SURE TO OBSERVE A 6-FOOT DISTANCE AT ALL TIMES]*

*[If **OVER THE PHONE**, GIVE THEM A PAPER COPY OF THE SURVEY & YOUR TEAM'S ASSIGNED PHONE NUMBER—RETURN TO THE CAR AND AWAIT THEIR CALL]*

*If they would like confirmation that you were sent by the Hawaii State Department of Health, please call **Lauren Guest**, Public Health Preparedness Planner at **808-241-3555**.*

# APPENDIX F

## Community Assessment for Public Health Emergency Response (CASPER) Tracking Form

County: \_\_\_\_\_ Cluster # (1-30): \_\_\_\_\_ Houses in the Cluster: \_\_\_\_\_ Team: \_\_\_\_\_ Date of Interview: \_\_\_\_ / \_\_\_\_ / \_\_\_\_

Instructions: Use one tracking form per cluster. Check where appropriate, but try to choose only one best option for each of the three categories.

Household Number	1	2	3	4	5	6	7	8	9	10	11	12
Survey Number (from questionnaire)												
<b>Access</b>												
House inaccessible	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Answer</b>												
Appears vacant	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
No answer after (indicate time)	First visit	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Second Visit	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Third visit	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Interview</b>												
Interview Completed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Refused to participate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ineligible to participate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Partial interview completed (indicate return time)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
"Come back later" (indicate return time)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Translator needed (specify language)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

\*REMINDER: You should not pass this line representing 7 selected (and interviewed) houses unless you replaced a household.

### Houses are only eligible for replacement if:

- 1) House is inaccessible (due to locked gate, vicious dogs, damage to property, etc.)
- 2) House appears vacant (nobody lives here anymore)
- 3) Household refuses to participate
- 4) No one is home after three attempts made at least one hour apart
- 5) Household is not eligible to participate (e.g. tourist—to be eligible, they should live here at least 4 months of the year)

# APPENDIX G

## Community Assessment for Public Health Emergency Response

*Kauai County Preparedness CASPER 2020*

### Confidential Referral Form

Date: 04 / \_\_\_\_ /2020 Time: \_\_: \_\_

Cluster No.: \_\_\_\_

Interviewer's Initials: \_\_\_\_

Name: \_\_\_\_\_

Address: \_\_\_\_\_

#### Contact Information:

Home telephone: \_\_\_\_ - \_\_\_\_ - \_\_\_\_

Cell phone: \_\_\_\_ - \_\_\_\_ - \_\_\_\_

E-mail: \_\_\_\_\_

summary of Need:

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*This section to be completed by the CASPER Operations Section*

Referral Made: ☐ Yes ☐ No

Referred to: \_\_\_\_\_